

MARSHALL STAR

Serving the Marshall Space Flight Center Community

May 8, 2003

Marshall Center's 'WinPlot' to vie for NASA-wide Software of the Year Award

from the Tech Transfer Office

The Marshall Center's winner for the Software of the Year Award in 2003 is "WinPlot" – a high-performance data analysis tool kit.

WinPlot will vie for the NASA-wide Software of the Year title in mid-June. The software is a powerful desktop graphical analysis tool that allows the user to conduct detailed analysis of unrestricted amounts of test and flight data. It is designed to operate on a Windows 98/NT/2000-based desktop platform.

WinPlot's features include seamless displays of real-time and post-test data with time and event-time synchronization of data from multiple sources. It was originally developed to support Space Shuttle Main Engine post-test and flight-data analysis. It is now used by numerous government and private industry analysts.

The NASA Software of the Year Award was initiated in 1994 to provide official recognition of inventions and other scientific and technical contributions that contribute to the achievement of NASA's goals in Aeronautical and Space Applications and to stimulate the creation and reporting of new innovations.

Every NASA Center and component facility participates in the competition.

Four software projects were nominated from the Marshall Center: WinPlot from the Space Transportation Directorate, author John Roger Moody and presenters Larry Leopard, Mary Beth Koelbl and Katherine VanHooser; J-Pass, J-Track from the Flight Projects Directorate, authors Patrick Meyer and Tim Horvath with Meyer presenting; Video Guidance Sensor Software (VGS) from the Engineering Directorate, authors Richard



Photo by Emmett Given, NASA/Marshall Center

NASA's Dr. Adena Loston visits Marshall

NASA Associate Administrator for Education Dr. Adena Loston visited the Marshall Center this week. She toured the Center and met with officials from schools that partner with NASA to pursue educational goals and inspire the next generation of explorers. Meeting at Alabama A&M University in Huntsville, are, from left, Marshall Director Art Stephenson, Marshall's Director of the Customer and Employee Relations Directorate Tereasa Washington, Loston, and Alabama A&M University President Dr. John Gibson.

First invention awards made to Marshall employees in 1961

by Mike Wright

The Marshall Center's set of values promotes innovation, and a recent story in the Marshall Star — "Innovation by two Marshall Center employees named NASA Commercial Invention of the Year" — illustrates that point.

That story was about Dr. David Hathaway and Paul Meyer receiving NASA's Commercial and Government Invention of the Year Award for the Video Image Stabilization and Registration System (VISAR).

Innovation has been a part of Marshall's history. On Nov. 8, 1961, the Marshall Star headlined a story, "First invention

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WinPlot

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Howard, Michael Book, John Weir and Phil Calhoun with Howard presenting; Measurement and Controls Data Acquisition System (MCDAS) from the Space Transportation Directorate, authors Alice Daniel, Frank Batts and Rick Hall with Daniel presenting.

All four of the software projects will be submitted to the Inventions and Contributions Board at NASA Headquarters for consideration for a Space Act Award.

Appointed representatives from the various technical organizations formed the Center evaluation committee. The committee members were Bob Keasling, Caroline Wang, Cathy White, Steve Robbins, Michael Wright, Bruce Donald, Thomas Fleming and Johnny Heflin. Caroline Wang, Marshall's software release authority, chaired the evaluation committee.

For next year's nominations, contact the Center Awards Liaison Officer, Jim McGroary at 544-0013.

For more information, go to <http://icb.nasa.gov/swoyinfo.html>.

Hit 'delete' to avoid e-mail scams

From NASA HQ Office of Security and Safeguards

Maybe you received one or you know someone who did — an e-mail from a foreign country offering an opportunity to participate in a money making scheme.

Please do not respond. This is a scam designed to separate you from your money.

Here's how it works. E-mail originating from a foreign nation is sent to addresses taken from a public source. The writer promises rich rewards for helping a government, bank or family out of an embarrassing situation or legal problem. Typically, the pitch includes mention of millions of dollars with the promise that you will be permitted to keep a percentage of the money if you help.

If you participate in this scam, it's guaranteed that "something will go wrong" that requires more money to get things back on track. The con artist may say that the necessary paperwork will be delayed or that officials need to be bribed. The amount they request may seem small in light of the windfall you are promised. If you pay, you will wait for the transfer of the reward money — and wait and wait. You will hear excuses about why the money is being held up and assurances that everything can be straightened out -- if you send more cash to help. Once you start making threats, you will never hear from the writer again. As for the money you paid, it's gone forever.

Marshall celebrates Asian Pacific American Heritage Month

The Marshall Center is celebrating Asian Pacific American Heritage Month this month.

The theme for this year's celebration is "Salute to Liberty" and will feature cultural foods, a fashion show and dance demonstration.

Daphne Kwok, executive director of the Asian Pacific American Institute for Congressional Studies, will speak at the main ceremony from 11:30 a.m.-1 p.m. in Morris Auditorium on May 28.

Other events during the month, with times and dates to be announced, include:

- Asian Pacific American Heritage Month Community Banquet
- Proclamation signing Huntsville Mayor Loretta Spencer
- Presentation of Proclamation to Marshall Director Art Stephenson
- Casual Conversation with Marshall Director Art Stephenson

For more information, call Willie Love at 544-0088.

Do people fall for this scam? Unfortunately, the answer is "Yes." A 1997 report from the Financial Crimes Division of the U.S. Secret Service confirmed losses of more than \$100 million in the United States during the previous 15 months.

This is not a new scam. In the 1920s it was referred to as "The Spanish Prisoner" con. And there are numerous variations of this scheme.

Unfortunately, as long as your address is publicly available there is nothing a government agency can do to prevent you from receiving these offers. So when you receive one, just hit the "delete" button on your computer.



Purchasing open house

A Purchasing open house in Bldg. 4200 offered a hands-on training seminar last week and gave Core Financial users the opportunity to work through new or existing purchasing documents with on-site support.

Photo by Emmett Given, NASA/Marshall Center

Vernotto McMillan awarded James E. Webb fellowship by National Space Club chapter

by Grant Thompson

The Washington, D.C., chapter of the National Space Club has awarded Vernotto McMillan, manager of the Technology Transfer Department at the Marshall Center, a prestigious fellowship.

The James E. Webb Memorial Space Fellowship, given in memory of the former NASA administrator to promote advanced education, is awarded to a NASA administration and management employee. McMillan was honored “for his proposed research topic related to changing the corporate culture of government research and development organizations through endorsement of core values.”

The National Space Club, founded in 1957, is a non-technical organization of industry, government and educational representatives that promotes leadership and advances in aeronautics.

A native of Pensacola, Fla., McMillan leads a team of 30 senior engineers, scientists and contract personnel in the Technology Transfer Department, which is responsible for making space technology a part of products and services used by people everyday. The department seeks to



McMillan

Photo by Doug Stoffer, NASA/Marshall Center

leverage the resources of industry, academia, and other government organizations in the development of next generation technologies needed in support of NASA programs, while stimulating broad use of NASA-developed technologies by American private enterprise.

McMillan began his NASA career in 1983 as a materials engineer at the Marshall Center. In 1991, he served as

manager of materials and processes in the Office of Safety and Mission Quality at NASA Headquarters in Washington, D.C., where his job was to assess in-flight anomalies and develop flight rationale recommendations for the associate administrator.

Returning to Marshall in 1992, McMillan became a sub-system manager on the Space Shuttle Solid Rocket Motor project in charge of phasing out the ozone depleting chemicals used in processing solid rocket motors and in 1994 became the case joints and seals subsystem manager. He became a technical manager in the Technology Transfer office in 1996, deputy manager of the department in 1998, and ascended to his current position in 2002.

McMillan has received awards for his job performance and dedication throughout his NASA career, including two NASA Exceptional Achievement Medals, a NASA Headquarters Special Service Award and the “Silver Snoopy” — awarded by the astronaut corps for dedication in support of the Space Shuttle program.

The writer, an employee of ASRI, supports the Media Relations Department.

Invention

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awards made to MSFC employees.” Max H. Sharpe of the Fabrication and Assembly Engineering Division and Dale L. Burrows of the Propulsion and Vehicle Engineering Division had become the first Marshall employees to receive NASA invention awards.

A \$300 award was presented to Sharpe and a \$50 award to Burrows in a ceremony held in Wernher von Braun’s office – Marshall’s center director at the time. When the Star published the story, Marshall was taking the initial steps toward building the Saturn rockets for the Apollo moon-landing program.

Sharpe’s invention related to an apparatus and method for the chemical milling of large hemispherical bulkheads for Saturn propellant tanks. In this invention, the bulkhead was placed in a chemical bath and rotated about its axis, whereby select portions of its surface could be accurately milled by chemical reaction.

Prior to adoption of this process, large bulkheads were made in several sections that were welded together. With Sharpe’s process, it became possible to make a large bulkhead from an integral piece of metal.

Burrows’ invention concerned insulation for containers for low temperature materials such as liquid oxygen and liquid hydrogen. A screening material was placed around the receptacle, spaced from it by numerous ribs that acted as thermal conductors. Atmospheric moisture crystallized on the screen and formed a frost insulation barrier around the container.

The Marshall Center continues its tradition of innovation today with continuing technology advances and research that benefit the space program and the nation’s private sector.

The writer is the Marshall Center historian.

Celebrating 'National Bike Month'

'Tour de Arsenal' bicycle ride and 'Bike to Work Day' this month

by Jamie H. Miernik

Two events are open for Redstone Arsenal bicycling enthusiasts during May, including a scenic ride around the Arsenal and a "Bike to Work Day."

The second annual "Tour de Arsenal" bike ride will be at 5 p.m., May 20, from Marshall's Exchange Fitness Center on Morris Road at Digney Road.

This 18-mile ride is open to all Marshall team members and Redstone Arsenal staff and escorted adult guests. The ride will roughly follow the historical railroad route around the southern part of the Arsenal, making a loop along Dodd, Buxton and Patton roads.

The Marshall Center's Environmental Excellence Team and the JE Sverdrup Marshall Support Contract Employee Morale and Welfare Committee are helping sponsor the ride.

The highlight of the tour features a unique path through NASA's West Test Area, past the massive Shuttle Main Engine test stand. Photos of the NASA test stand will be allowed, but photos will not be permitted through the Army Test Area 1 (TA1). Riders will continue south on the closed section of Dodd Road past the Wheeler Wildlife Refuge with a stop at the Redstone Recreation Area on the Tennessee River. Riders will return north along Patton Road at about 6 p.m. after most traffic has left the Arsenal.

The Tour falls during National Bike Month and follows the official "Bike-to-Work Day" on May 16, as declared by the League of American Bicyclists and the city of Huntsville.

Participants in the bike-to-work event at NASA are invited to meet at the Runner's Parking lot off Airport Road, which is near the entrance to the Municipal Golf Course in Huntsville, for a "Ride en Masse to Work" at 7 a.m. If you live close enough, you can ride your bike, or drive and park at the lot. The "Park-N-Ride" concept is an option for employees who live too far away, but would like to incorporate regular exercise into a time slot



Photo by Emmett Given, NASA/Marshall Center

Jamie Miernik, right, talks bicycle safety to Marshall team members during recent Earth Day activities at the Center.

reserved for commuting to work. It's about eight miles to NASA from the parking area.

Maps will be available and an experienced bike commuter, Jamie Miernik, will lead the ride. The "Best Route to NASA" was displayed at the NASA Earth Day celebration sponsored by the Environmental Excellence Team.

Make plans to participate and learn the "Best/Safest Route to NASA/Redstone," which encourages bike commuters to utilize the safest road facilities.

Helmets are mandatory for anyone cycling on the Arsenal. The ride is fairly flat. Children will not be allowed to participate.

Cycling is an environmentally friendly means of transportation that more and more Americans are re-discovering.

For more info on the Tour de Arsenal, contact Jamie Miernik at 544-6534.

The writer is a senior mechanical design engineer with ERC, Inc. in Jacobs Sverdrup Technology's Marshall Group supporting the Marshall Center.

Cycling statistics

Here are few statistics about transportation risks in the U.S. with a focus on bicycling:

- It is estimated that there are 85 million bicycle riders in the U.S.
- Annual U.S. bicycle fatalities average 710
- 90 percent of bicycle fatalities are riders without helmets

- Annual U.S. pedestrian fatalities average 4,899
- Annual U.S. motor vehicle fatalities average 42,116
- 2000 U.S. census data shows a 9-percent increase in bicycle commuting from 1990 to 2000
- The British Medical Association has said the benefits of riding a bike outweigh the risks by a ratio of 20 to 1

- The American Medical Association concluded: "Even after adjustment for other risk factors, those who did not cycle to work experienced a 39-percent higher mortality rate than those who did."
- The Harvard Center for Risk Analysis says the risk of death for heart disease is one in 397, a motor vehicle accident is one in 6,745, and for a bicycle accident is one in 376,165

NASA's Aqua satellite data helps weather prediction

JPL/NASA Headquarters release

Your weatherperson's job just got a little easier, thanks to new data available from advanced weather instruments aboard NASA's Aqua satellite.

The new data are the most accurate, highest-resolution measurements ever taken from space of the infrared brightness (radiance) of Earth's atmosphere. This information can be used to make more accurate predictions of weather and climate.

The data come from two microwave sounding instruments that are part of the

Atmospheric Infrared Sounder experiment — the Atmospheric Infrared Sounder and the Advanced Microwave Sounding Unit.

With its visible, infrared and microwave detectors, the Atmospheric Infrared Sounder experiment provides a three-dimensional look at Earth's weather. Working in tandem, its instruments can make simultaneous observations from space all the way to Earth's surface, even in the presence of heavy clouds. With more than 2,400 channels sensing different regions of the atmosphere, the system creates a global, three-dimensional map of atmospheric temperature and humidity and provides information on clouds, green-

house gases and many other atmospheric phenomena.

"The Atmospheric Infrared Sounder experiment is demonstrating high sensitivity and accuracy," said Dr. Moustafa Chahine, science team leader at NASA's Jet Propulsion Laboratory in Pasadena, Calif., which manages the experiment. "Meteorologists around the world have been eagerly awaiting the availability of this processed Atmospheric Infrared Sounder data, and are already reporting measurable increases in the accuracy of their short-term weather predictions. NASA and the world's weather prediction agencies can now also use Atmospheric Infrared Sounder experiment data to better track severe weather events, like hurricanes."

Dr. Tony McNally of the European Center for Mid-range Weather Forecasts in Reading, England, reported that the use of Atmospheric

Infrared Sounder experiment data resulted in "a small but consistent positive impact on forecast quality in all areas."

Dr. Hank Revercomb, director of the Space Science and Engineering Center at the University of Wisconsin, called the experiment "a virtual gold mine of information."

Dr. Louis Ucellini, director of the National Oceanic and Atmospheric Administration's National Centers for Environmental Prediction, said adopting data from the Atmospheric Infrared Sounder experiment is "our number one priority."

Chahine said more advanced data products are expected to become available later this year. The data will include atmospheric temperature and humidity profiles as well as additional environmental measurements on various types of clouds, particularly the thin veil of cirrus clouds that cover Earth. He also expects new data on concentrations of greenhouse gases, such as carbon dioxide, methane, carbon monoxide and volcanic sulfur dioxide.

The National Oceanic and Atmospheric Administration is continuing to evaluate the new data, learning how to integrate it and gaining confidence in its accuracy. When that process is completed this summer, the agency will begin integrating the data into existing weather prediction models used by its National Centers for Environmental Prediction. Six of the world's leading weather-prediction centers will do the same. The data will also be distributed to the World Meteorological Organization in Switzerland, where it will be available to 105 countries.

Aqua's planned six-year mission will collect data, using six onboard instruments, on global temperature variations, the cycling of water, global precipitation, evaporation, changes in ocean circulation, and how clouds and surface-water processes affect climate. The information will help scientists better understand how global ecosystems change and how they respond to and affect global environmental change.

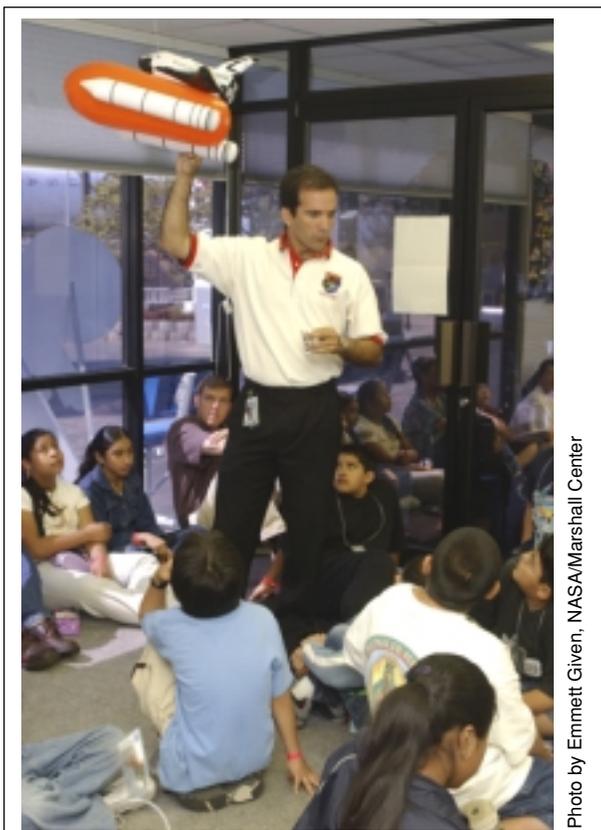


Photo by Emmett Given, NASA/Marshall Center

Propulsion discussion

Jose Matienzo of the Space Transportation Directorate explains to Hispanic students how space propulsion systems work. The students were part of a group of about 100 children from Decatur-area schools visiting Marshall's Educator Resource Center at the U.S. Space & Rocket Center for Alabama Aerospace Science Education Week. The program's goals are to keep students on an education track toward college by encouraging course-work in math and science in high school and to introduce their teachers to NASA education materials.

MARS basketball champions

Three MARS teams earned championship status for the 2002-2003 tournament basketball season. Teams competed in three divisions.



Team "Magic," Division 1 champions, are, from left, Ron Corn, Travian Smith, Terry Jones, Charles Hutton and Joe Gaines.



Team "TRW" Division 2 champions, are, in the front row, from left, Louie Stoudmire, Adam Bertagnolli, Joey Driggers and Justan Provence. In the back row, from left, Marvin McKinney, Andre Reynolds, Donny Gray, Jason Skipworth and Terry Collins.

Photo by Doug Stoffer, Marshall Center

Photo by Dennis Olive, NASA/Marshall Center

Obituaries

Richard C. Callaway, 83, of Huntsville, died April 25. Funeral services were held at First Baptist Church with Dr. David Hull officiating. Burial was in Maple Hill Cemetery.

Callaway was born April 18, 1920, in Huntsville and retired from the Marshall Center in 1977 where he worked as an aerospace engineer after more than 20 years in civil service.

He is survived by his wife, Nathalee H. Callaway; one son, Dr. Richard C. Callaway III of Knoxville, Tenn.; three daughters, Nancy Dunn of Columbus, Ohio, Janice Malone of Huntsville and Jean Ingram of Fairhope; one brother, William D. Callaway of Huntsville; nine grandchildren; and five great-grandchildren.

Norris W. Phillips, 93, of Huntsville, died April 18. Funeral services were held at Crestwood Chapel with the Rev. Emerson Lyle officiating. Burial was in Crestwood Cemetery with Crestwood Funeral Home directing.

Phillips was born Feb. 27, 1910, in Calhoun County. He was one of 14 children and was formerly of Gadsden before moving to Huntsville where lived for 43 years. He retired from the Marshall Center in 1971 where he worked as an equipment specialist supervisor. He was the widower of Roberta Phillips, his wife of 65 years.

He is survived by two sons, Benny Phillips and Robert Phillips; two daughters, Ann Browning and Jeanine Wyatt; two sisters, Ida Mae Carr and Lois Cobb; six grandchildren; and eight great-grandchildren.

John Shaw, 65, of Huntsville, died April 28. Funeral services were held at St. Bartley Primitive Baptist Church with Dr.



Team "CSC" Division 3 champions, are, from left, Emmett Kennemore, Ron Ford, Lionel Marealle, Ken Robison, Neal Contrell, Jamie Cain, Ira Lacey and Scott Johnson.

Photo by Doug Stoffer, NASA/Marshall Center

William T. Gladys officiating. Burial was in Valhalla Memory Gardens with Royal Funeral Home directing.

Shaw was born July 10, 1937, in Gastonburg to L.C. and Annie Shaw. He was a graduate of Alabama A&M University and was a U.S. Army veteran. He worked for CORTEZ at the Marshall Center and also was employed by Holiday Inn.

He is survived by his wife, Earnestine Crawford Shaw; one daughter, Aretha Shaw-Hammonds of Fort Jackson, S.C.; his mother, Annie Shaw of Alberta; three brothers, Nehemiah Shaw of Jackson, Miss., Leroy Shaw of Alberta and Willie Shaw of Los Angeles; one sister, Cora Shaw of Los Angeles; and one grandchild.

Job Announcements

For a complete list of vacancy announcements, go to http://www1.msfc.nasa.gov/INSIDE/announcements/msfc_jobs.html.

Center Announcements

Dial-in and VPN require security registration

Marshall team members who use the Virtual Private Network software to connect to the Marshall Private Network, or who dial directly into the network from home or TDY, must apply for a MSFC RSA SecurID Token in May or June. For more information, including frequently asked questions and an updated schedule to apply, go to http://www1.msfc.nasa.gov/INSIDE/announcements/dial_in_token.html.

Thrift Savings Plan season open

The Thrift Savings Plan open season closes June 30 for employees wanting to begin, increase or decrease, contributions to their account. For more information, see "Inside Marshall" or call 544-5654 or 544-7536.

Disability awareness training required for all civil servants

In a few weeks, the Employee and Organizational Development Department will offer an online disabilities awareness training course and all civil servants are required to participate. The training is designed to heighten awareness and knowledge of regulatory requirements under the Rehabilitation Act and help the workforce understand the special needs of employees with disabilities. The training touches on all five of the Marshall Center values. Credit will be received in training records for those taking the course.

Marshall Association luncheon will be Tuesday

The Marshall Association will host a luncheon from 11:30 a.m.-1 p.m. Tuesday at the Redstone Officers' and Civilians' Club. John Gordon, meteorologist in charge of the weather forecast office for the National Weather Service in Huntsville, will speak. The luncheon costs \$9, payable at the door, but reservations are required and can be made by e-mail to Cliff Bailey or by calling 544-5482.

Karate Club offering Tai Chi

The Marshall Seibukan Karate Club is offering Tai Chi as a form of exercise for health and mobility. The club also is offering "beginner friendly" karate classes on Mondays and Wednesdays from 3:45-4:45 p.m. For more information, see "Inside Marshall" or contact Bill Mayo at 544-7564.

Marshall Team Meeting is Monday

The Marshall Team Meeting will be at 8:30 a.m. Monday, Bldg. 4200, Room P110.

E-learning available; 2003 course catalogs updated

The Self-Study Learning Center has updated 2003 course catalogs available. Marshall team members can choose from 1,500 courses they can access from the office, home or on TDY -- anywhere there is Internet access. Accounts are given on a first-come, first-serve basis. For more information, call 544-8291 or go to self.study@msfc.nasa.gov or <http://mi.msfc.nasa.gov/elearning>.

MARS Archery Club beginning season

The MARS Archery Club league will be held each Thursday until the fall. Shoots start at about 4:30 p.m. and continue until dark. Participation is open to all club members. Membership is \$5 for singles, or \$10 for a family per year, and is open to all civil servants and on-site contractors. For more information, call Rich Wegrich at 544-2626.

Retired Federal Employees to meet Saturday

The National Association of Retired Federal Employees will meet at 9:30 a.m. Saturday at the Senior Center on Drake Avenue in Huntsville. Barbara Watson of Alabama Citizens for Constitutional Reform will speak. For more information, call 881-4944 or 881-3168.

STS-107 memorabilia available for pickup

Pre-ordered STS-107 memorabilia is available for pickup in the Space Shop, Bldg. 4203, from 9 a.m.-2 p.m.

IT security conference is Tuesday-Wednesday

The fifth annual IT Security and Assurance Conference and Expo will be from 8 a.m.-5:30 p.m. Tuesday-Wednesday at the John J. Sparkman Complex, Bldg. 5304. The exposition is sponsored by the U.S. Army at Redstone Arsenal and the Marshall Center. The conference theme is "Mission Possible: Securing Sensitive Data and Protecting the Homefront." To register, go to www.TechnologyForums.com/redstone-nasa.

MARS ballroom dance lessons available

The MARS Ballroom Dance Club will be teaching the Foxtrot to beginners and intermediates on Monday's in May excluding Memorial Day, and on the first Monday in June. Intermediate classes are from 7-8 p.m. and beginners from 8-9 p.m. at St. Stephens Episcopal Church on Whitesburg Drive. Cost is \$6 per person, for each lesson, but free for dance club members. For more information, call Woody Bombara at 650-0200.

Trade studies and decision making course will be June 18-19

A trade studies and decision making course for civil servants will be June 18-19 in Bldg. 4200, Room G-13E. Registration is through AdminSTAR. For more information, call Tina Smith at 544-7834.

Management Operations Office retirees to meet

Management Operations Office retirees will meet for breakfast at 10 a.m. May 22 at the Cracker Barrel Restaurant in Madison.

For more Center Announcements, see "Inside Marshall"

Employee Ads

Miscellaneous

- ★ Assault pellet rifle, one-pump under-lever, clip-fed, folding stock. Wood/steel, w/sling. \$65. 306-0700
- ★ Integra nine-degree titanium driver, Graffaloy Pro-Lite stiff shaft, \$80. 851-7406
- ★ Passport SM buoyancy compensator device (BCD), \$100. 656-2965/351-6066
- ★ Ski equipment, \$250; wedding dress, white, long sleeves w/veil, \$350; electric fence, \$100. 828-6287
- ★ Weslo motorized treadmill, \$150. 859-2633
- ★ Hair dryer, hard-bonnet style, \$25; Black & Decker Scumbuster scrubber, \$25. 776-9165
- ★ 1976 Harley Davidson Electa Glide Bicentennial Edition, \$7,700. 922-9294
- ★ Twin size black metal four post bed, \$75. 652-0379
- ★ Black leather love seat, \$50. 533-9683
- ★ Loose diamond, 1/2 carat; S.I. clarity, GH color; wedding band w/small diamond baguettes, both \$500. 883-5543
- ★ Grandfather clock, 6', German movement, sun & moon face, recently overhauled. 682-1431
- ★ Women's Trek 820 mountain bike, 21-speed, grip shift, comfort style seat, handle bars, \$120. 882-1566
- ★ 2002 Honda Shadow Sabre 1100, black, 9K miles, \$6,900. 837-9420
- ★ Zenith 36" color TV, PiP, remote, stereo sound, \$350 obo. 232-9998 Denise/Marcus
- ★ Dining set, dark oak, table, 2 leaves, 6 chairs, china cabinet, \$1,200. 430-0080
- ★ Queen-size solid oak waterbed w/6 drawer pedestal and headboard, \$50. 721-9101
- ★ Green vinyl-coated chain-link fence, 100', top rail and all, \$150. 652-5575
- ★ Red double pillow back couch \$50; double recliners. 256-828-0401
- ★ New in box Valla Coach loafers, mahogany/khaki signature, size 8, \$65. 658-3431
- ★ Two horse trailer, \$1,500. 852-5446 after 5 p.m.
- ★ Sleeper sofa, 91"; solid Oak dining table, 48" diameter, w/4 chairs; component stereo. 256-653-7792
- ★ Dixie Chicks tickets, two lower level seats, Birmingham BJCC, May 16, \$150. 783-4420
- ★ Folding wooden ladder, 6', \$20. 922-1424
- ★ Ladies 14K YG engagement ring w/approx. 1-carat marquise solitaire & 12-0.8 carat round diamonds. 351-9822
- ★ Dreamcast gaming system, 15 games, 2 control-

- lers, memory card, \$100. 882-9591
- ★ Antique upright piano, make offer. 721-9107 evenings/679-4082 cell
- ★ Ford Motorsport heavy-duty radiator, fits 1979-93 Mustang and 1983-88 T-Bird, V8, \$150. 837-9479
- ★ Baby jogger, \$125. 256-461-8359
- ★ 1988 Chaparral 2350 w/Cuddy Cabin, Mercruiser motor & outdrive, \$8,900. 256-351-2249/214-1836
- ★ Streaker 2-seat go-kart, \$300. 533-5942
- ★ Yamaha 250 trail off-road motorcycle, \$550; motorcycle helmet, red, full-face, size small. 430-6897
- ★ McGregor golf bag and head covers black w/silver trim, \$30. 533-4824
- ★ Kitchen table and four chairs, wood grain formica top w/chrome legs, one leaf, \$45. 828-5326
- ★ Cream color overstuffed sofa, \$135; round dinette table, \$40; Honda push mower, \$20. 316-2902
- ★ Men's 10-speed Spectra bicycle, \$35. 881-0602 after 5 p.m.
- ★ Assorted moving boxes including wardrobes w/hanger bars. 683-9364
- ★ Ring, band, w/pear cut .50 carat diamond in bezel w/10 round diamonds, \$1,500. 536-8223
- ★ 1985 250 Honda Big Red ATV 3-wheeler, electric start, new tires, \$2,000. 256-572-1011
- ★ 1964 Ford 2000 tractor, 4-cylinder gas engine, front loader, 3-point box scraper, \$4,800. 216-8868
- ★ Kid's bike, \$20; Big Wheel, \$15; Hard-bonnet hair dryer, new, \$20. 776-9165
- ★ Hard top for 1995 Corvette convertible, storage bag and accessories, heated glass window, \$1,300. 678-596-8864
- ★ Sealy Posture-pedic full-size mattress set, 3 pieces, \$125. 883-2237

Vehicles

- ★ 1997 Jeep Grand Cherokee, 94K miles, power windows/locks, new tires, \$7,900. 520-9811/895-0634
- ★ 1995 F150, 300 inline six, manual, dual gas tanks, toolbox, 107K miles, \$5,500. 895-2959
- ★ 2001 Honda Odyssey EX, green metallic, 54K miles, gold trim, wind deflector, \$20,500. 881-6016
- ★ 1998 Ford Mustang, black, 3.8L, 5-speed, dual exhaust, Eagle radials, spoiler, loaded, \$8,500. 895-0577
- ★ 1950 M Farmall tractor, \$2,000; 1984 Ford Bronco II, 4WD, automatic, 75K miles, \$2,000. 723-4991
- ★ 1986 Honda Accord, 170K miles, a/c broken, maroon body, tan hood, \$1,200. 426-2516

- ★ 1995 Ford Explorer, Eddie Bauer, new tires, CD, alloy, leather, abs, 109K miles, \$6,500. 880-6563
- ★ 1998 Ford Ranger XLT, ext. cab, 5-speed, AM/FM/cassette, 49K miles, \$8,500. 882-5363
- ★ 2001 Chevy Tahoe LT, 4WD, 34K miles, loaded, seats eight, \$27,000. 256-828-0103
- ★ 1998 Toyota Rav4, 4-door, white, auto, 60K miles, \$9,800. 961-1093/551-2933
- ★ 1997 Nissan Maxima SE, 4-door, 82K miles, pearl white, automatic, CD, new brakes, \$9,990. 881-8674
- ★ 1996 Buick Regal Gransport, low mileage, loaded, moon roof, one-owner, \$8,500. 653-9124/534-7791
- ★ 2002 Toyota 4Runner, V6 TRD-super charged, 38K miles, loaded, silver, 100K Powertain warranty; \$22,500. 256-227-4121/773-1405
- ★ 2001 Suzuki Grand Vitara XL7/SUV, white, 47K miles, one-owner, seats seven, sunroof, CD/Cassette, \$17,000. 837-8487
- ★ 1999 Ford Ranger XLT Sport, Supercab, 4-door, 6-cyl., CD, cruise, power windows/locks, \$9,300. 859-0729

Wanted

- ★ Tomato cages; 12HP or larger vertical shaft engine for tractor/riding mower. 881-6040
- ★ Duncan-Fyffe table leaf, 40" long, condition not important. 881-4287
- ★ Used Mazda B Series or Ford Ranger pickup, 1994-1995 year model. 880-2990/Mick
- ★ Bolens 1256 garden tractor, running or not, attachments also. 533-4244
- ★ Mitsubishi shop manual for '96 Eclipse. 379-4677
- ★ Apartment size washer/dryer, good condition; Lenox china, Springdale pattern, serving pieces, place setting, etc. 256-232-5552

Free

- ★ White cat, 6 yrs. old, bobbed tail, female, spayed, declawed front paws, shots, licensed. 837-1886/679-2589

Found

- ★ Child's size Auburn jacket, name inside. Call 544-2571 to claim/identify

Lost

- ★ Brown stone and metal bracelet w/magnetic catch. Call 544-2571 if found

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